RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

<i>101541,9</i> 93
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67-21-05

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RAW SEQUENCE LISTING DATE: 07/21/2005 PATENT APPLICATION: US/10/541,993 TIME: 09:15:44

Input Set : A:\Final Sequence list-13311-00010-US.txt

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3 <110> APPLICANT: Matuschek, Markus
             Heinekamp, Thorsten
     5
             Schmidt, Andre
             Brakhage, Axel
     8 <120> TITLE OF INVENTION: Method for the genetic modification of organisms of the
genus
             Blakeslea, corresponding organisms, and the use of the same
    11 <130> FILE REFERENCE: 13311-00010-US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/541,993
C--> 13 <141> CURRENT FILING DATE: 2005-07-08
                                                                     (pg-6)
    13 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/000100
    14 <151> PRIOR FILING DATE: 2004-01-09
    16 <150> PRIOR APPLICATION NUMBER: DE 103 00 649.4
    17 <151> PRIOR FILING DATE: 2003-01-09
    19 <150> PRIOR APPLICATION NUMBER: DE 103 41 272.7
    20 <151> PRIOR FILING DATE: 2003-09-08
    22 <160> NUMBER OF SEQ ID NOS: 80
    25 <170> SOFTWARE: PatentIn version 3.2
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    28 <211> LENGTH: 2160
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    30 <213> ORGANISM: Artificial Sequence
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    33 <223> OTHER INFORMATION: Promoter
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    40 ttcatgggcg ttggcatgat ggccgtcatg catctgtact tcaagtacac caacgctctt
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    42 ctgatccagt cgatcatccg ctgaaggcgc tttcgaatct ggttaagatc cacgtcttcg
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    44 ggaagccage gactggtgac etccagegte cetttaagge tgccaacage tttetcagee
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    46 agggccagcc caagaccgac aaggcctccc tccagaacgc cgagaagaac tggaggggtg
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    48 gtgtcaagga ggagtaagct cettattgaa gtcggaggac ggagcggtgt caagaggata
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    50 ttcttcgact ctgtattata gataagatga tgaggaattg gaggtagcat agcttcattt
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    52 ggatttgett tecaggetga gactetaget tggageatag agggteettt ggettteaat
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    54 atteteaagt atetegagtt tgaacttatt eeetgtgaac ettttattea eeaatgagea
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    56 ttggaatgaa catgaatctg aggactgcaa tcgccatgag gttttcgaaa tacatccgga
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    58 tgtcgaagge ttggggcace tgcgttggtt gaatttagaa cgtggcacta ttgatcatce
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    60 gatagetetg caaagggegt tgeacaatge aagteaaaeg ttgetageag ttecaggtgg
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    62 aatgttatga tgagcattgt attaaatcag gagatatagc atgatctcta gttagctcac
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    900
    66 ggctacggaa gacggagaag ccaccttcag tggactcqaq taccatttaa ttctatttgt
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    68 gtttgatcga gacctaatac agcccctaca acgaccatca aagtcgtata gctaccagtg
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    70 aggaagtgga ctcaaatcga cttcagcaac atctcctgga taaactttaa gcctaaacta
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Input Set : A:\Final Sequence list-13311-00010-US.txt

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     80 ggacggacgc agagagaagg gctgagtaat aagccactgg ccagacagct ctggcggctc
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     84 ggctggtgtg cccctcgttg accaagaatc tattgcatca tcggagaata tggagcttca
     86 togaatcacc ggcagtaagc gaaggagaat gtgaagccag gggtgtatag ccgtcggcga
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     88 aataqcatqc cattaaccta ggtacagaag tccaattgct tccgatctgg taaaagattc
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     92 tggcccatcc ggcatctgta gggcgtccaa atatcgtgcc tctcctgctt tgcccggtgt
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     94 atgaaaccgg aaaggccgct caggagctgg ccagcggcgc agaccgggaa cacaagctgg
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     96 cagtcgaccc atccggtgct ctgcactcga cctgctgagg tccctcagtc cctggtaggc
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     102 cttttcccat cttcagtata ttcatcttcc catccaagaa cctttatttc ccctaagtaa
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     104 qtactttgct acatccatac tccatccttc ccatccctta ttcctttgaa cctttcagtt
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     119 <221> NAME/KEY: misc feature
     120 <222> LOCATION: (267)..(267)
     121 <223> OTHER INFORMATION: n is a, c, g, or t
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     126 <223> OTHER INFORMATION: n is a, c, g, or t
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     131 <223> OTHER INFORMATION: n is a, c, g, or t
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     136 tqqtqtcgat gtcaqctccq gagttgagac aaatggtgtt caggatctcq ataagatacg
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     138 ttcatttgtc caagcagcaa agagtgcctt ctagtgattt aatagctcca tgtcaacaag
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     140 aataaaacgc gttttcgqqt ttacctcttc cagatacagc tcatctgcaa tgcattaatg
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W--> 142 cattgactgc aacctagtaa cgccttncag gctccggcga agagaagaat agcttagcag
     144 agetatttte atttteggga gacgagàtea ageagateaa eggtegteaa gagacetaeg
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     146 agactgagga atccgctctt ggctccacgc gactatatat ttgtctctaa ttgtactttg
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     148 acatgctcct cttctttact ctgatagctt gactatgaaa attccgtcac cagcncctgg
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     152 atcgtaggta taaacctcga aatcanttcc tactaagatg gtatacaata gtaaccatgc
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    154 atggttgcct agtgaatgct ccgtaacacc caatacgccg gccgaaactt ttttacaact
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     156 ctcctatgag tcgtttaccc agaatgcaca ggtacacttg tttagaggta atccttcttt
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Input Set : A:\Final Sequence list-13311-00010-US.txt

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172 <222> LOCATION: (3471)..(3471)
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175 <220> FEATURE:
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180 <220> FEATURE:
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183 <223> OTHER INFORMATION: n is a, c, g, or t
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190 cagttcatgg gcgttggcat gatggccgtc atgcatctgt acttcaagta caccaacgct
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192 cttctgatcc agtcgatcat ccgctgaagg cgctttcgaa tctgqttaag atccacgtct
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214 caccacaaaa gtcagacggc gtaaccaaaa gtcacacaac acaagctgta aggatttcgg
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216 cacggctacg gaagacggag aagccacctt cagtggactc gagtaccatt taattctatt
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220 gtgaggaagt ggactcaaat cgacttcagc aacatctcct ggataaactt taaqcctaaa
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222 ctatacagaa taagataggt ggagagctta taccgagctc ccaaatctgt ccagatcatg
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224 gttgaccggt gcctggatct tcctatagaa tcatccttat tcgttgacct agctgattct
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226 ggagtgaccc agagggtcat gacttgagcc taaaatccgc cgcctccacc atttgtagaa
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238 cgaaatagca tgccattaac ctaggtacag aagtccaatt gcttccgatc tggtaaaaga
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240 ttcacgagat agtacettet eegaagtagg tagagegagt acceggegeg taageteeet
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242 aattggccca tccggcatct gtagggcgtc caaatatcgt gcctctcctg ctttgcccgg
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Input Set : A:\Final Sequence list-13311-00010-US.txt

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     250 agtecaacat ttgttgecat atttteetge tetececace agetgetett ttetttete
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     252 tttcttttcc catcttcaqt atattcatct tcccatccaa gaacctttat ttcccctaaq
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     254 taagtacttt gctacatcca tactccatcc ttcccatccc ttattccttt gaacctttca
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     256 gttcgagctt tcccacttca tcgcagcttg actaacagct accccgcttg agcagacatc
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     260 gtctccgacc tgatgcagct ctcggagggc gaagaatctc gtgctttcaq cttcqatgta
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     262 ggagggcgtg gatatgtcct gcgggtaaat agctgcgccg atggtttcta caaagatcgt
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     272 ggtcaataca ctacatggcg tgatttcata tgcgcgattg ctgatcccca tgtgtatcac
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     274 tggcaaactg tgatggacga caccgtcagt gcgtccgtcg cgcaggctct cgatgagctg
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     276 atgetttggg cegaggactg cecegaagte eggeaceteg tgeaegegga ttteggetee
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Input Set : A:\Final Sequence list-13311-00010-US.txt

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392	gggaatttat	ggaacgtcag	tggagcattt	ttgacaagaa	atatttgcta	gctgatagtg	6240
394	accttaggcg	acttttgaac	gcgcaataat	ggtttctgac	gtatgtgctt	agctcattaa	6300
396	actccagaaa	cccgcggctg	agtggctcct	tcaacgttgc	ggttctgtca	gttccaaacg	6360
398	taaaacggct	tgtcccgcgt	catcggcggg	ggtcataacg	tgactccctt	aattctccgc	6420
			cccgccttca				6480
402	ttggcgggta	aacctaagag	aaaagagcgt	ttattagaat	aatcggatat	ttaaaagggc	6540
404	gtgaaaaggt	ttatccgttc	gtccatttgt	atgtgcatgc	caaccacagg	gttccccaga	6600
			cgagcaagat				6660
			caaattgcac				6720
			agtgaaccag				6780
			cgtcgagcgc				6840
			tccggaccag				6900
			tggacatatt				6960
			agtgatccgt				7020
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			gcgggcgctg				7140
			gccgagagcc				7200
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			gccgctgttg				7500
			gcagggactc		-		7560
			tgaaggaccg				7620
440	ccggagcgca	acccactcac	tacagcagag	ccatgtagac	aacatcccct	cccctttcc	7680

Input Set : A:\Final Sequence list-13311-00010-US.txt

Output Set: N:\CRF4\07212005\J541993.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 267 478,566 Seq#:3; N Pos. 3471,3679,3770 Seq#:4; N Pos. 227,318,526,8946,10028 Seq#:36; N Pos. 10264,10472,10563 Seg#:37; N Pos. 10264,10472,10563 Seq#:38; N Pos. 10264,10472,10563 Seq#:39; N Pos. 10264,10472,10563 Seq#:40; N Pos. 3471,3679,3770 Seq#:41; N Pos. 3471,3679,3770 Seq#:42; N Pos. 10264,10472,10563 Seq#:43; N Pos. 10264,10472,10563 Seq#:44; N Pos. 10264,10472,10563 Seq#:45; N Pos. 18970,19178,19269 Seq#:46; N Pos. 3471,3679,3770 Seq#:47; N Pos. 10264,10472,10563 Seq#:48; N Pos. 10264,10472,10563 Seq#:49; N Pos. 3471,3679,3770 Seq#:50; N Pos. 10264,10472,10563 Seq#:51; N Pos. 10264,10472,10563 Seq#:52; N Pos. 3,9 Seq#:53; N Pos. 3,6 Seq#:62; N Pos. 3471,3679,3770 Seq#:75; N Pos. 2694,4263

VERIFICATION SUMMARY DATE: 07/21/2005 PATENT APPLICATION: US/10/541,993 TIME: 09:15:45

Input Set : A:\Final Sequence list-13311-00010-US.txt
Output Set: N:\CRF4\07212005\J541993.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:240 M:341 Repeated in SeqNo=2 L:300 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:3420 M:341 Repeated in SeqNo=3 L:754 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180 M:341 Repeated in SeqNo=4 L:3745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:10260 M:341 Repeated in SeqNo=36 L:4313 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:10260 M:341 Repeated in SeqNo=37 L:4935 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:10260 M:341 Repeated in SeqNo=38 L:5537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:10260 M:341 Repeated in SeqNo=39 L:5911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:3420 M:341 Repeated in SeqNo=40 L:6553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:3420 M:341 Repeated in SeqNo=41 L:7423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:10260 M:341 Repeated in SeqNo=42 L:8037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:10260 M:341 Repeated in SeqNo=43 L:8629 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:10260 M:341 Repeated in SeqNo=44 L:9511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:18960 M:341 Repeated in SeqNo=45 L:9669 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:3420 M:341 Repeated in SeqNo=46 L:10633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:10260 M:341 Repeated in SeqNo=47 L:11251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:10260 M:341 Repeated in SeqNo=48 L:11621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:3420 M:341 Repeated in SeqNo=49 L:12491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:10260 M:341 Repeated in SeqNo=50 L:13139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:10260 M:341 Repeated in SeqNo=51 L:13430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0 L:13453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0 L:13691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:3420 M:341 Repeated in SeqNo=62 L:14577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:2640 M:341 Repeated in SeqNo=75